What is claimed is:

1. A programmable annunciator control system, comprising:

a set of stored-sequence executable instructions to implement functions of the annunciator control system;

an annunciator control unit capable of executing said stored-sequence executable instruction set;

a computer-readable clock to furnish timekeeping information to said annunciator control unit; and

a set of annunciators controlled by said annunciator control unit.

2. The programmable annunciator control system of claim 1, wherein said set of stored-sequence executable instructions further comprises:

a command routine implemented in stored-sequence executable instructions;

a monitor routine implemented in stored-sequence executable instructions;

a supervisor routine to evaluate and rank events reported by said monitor routine;

a system status report generator implemented in stored-sequence executable instructions;

a realtime data backup and storage routine implemented in stored-sequence executable instructions, wherein said realtime data backup and storage routine records a succession of system status reports in said nonvolatile storage, as generated by said system status report generator; and

a configuration status display routine for generating a display output representing said commands and said system status reports.

3. The programmable annunciator control system of claim 2, wherein said monitor routine is installed in said annunciator control unit.

4. The programmable annunciator control system of claim 2, wherein said monitor routine responds to each system event.

5. The programmable annunciator control system of claim 1, wherein said set of stored-sequence executable instructions further comprises a scheduling sequence permitting multiple signal transmissions to be made at preselected times.

6. The programmable annunciator control system of claim 1, wherein said set of stored-sequence executable instructions further comprises a scheduling sequence permitting a multiplicity of command signals to be broadcast, wherein each command signal may be directed to any selectable combination of annunciators and may have any selectable combination of attributes.

7. The programmable annunciator control system of claim 1, wherein said annunciator control unit further comprises:

a human interface subsystem supporting command and configuration input and display for said annunciator control unit;

a nonvolatile storage subsystem storing and retrieving data on behalf of said annunciator control unit; and

a communications subsystem establishing a communication link between said annunciators and said annunciator control unit.

8. The programmable annunciator control system of claim 7, wherein said human interface subsystem further comprises:

a video display, whereupon said display output of said configuration status display routine can displayed;

a keyboard-type data entry device wherewith data and commands comprising keystrokes may be entered; and

a mouse-type data entry device, wherewith position data and mouse-click data may be entered.

9. The programmable annunciator control system of claim 7, wherein said human interface subsystem further comprises:

a microphone-type audio input device which converts sounds to electronic signals for further processing within said human interface subsystem; and

a first sound signal processing device to convert electronic signals from said microphone-type audio input device into a form in which said audio input can be processed by said annunciator control unit.

10. The programmable annunciator control system of claim 7, wherein said human interface subsystem further comprises:

an audio output signal generator; and

a second sound signal processing device to convert an audio output from a form in which said audio output can be generated by said annunciator control unit into a form in which said audio output can be carried by said audio output signal generator.

11. The programmable annunciator control system of claim 7, wherein said nonvolatile storage subsystem further comprises a disk drive, interface electronics, and operating software.

12. The programmable annunciator control system of claim 7, wherein said nonvolatile storage subsystem further comprises nonvolatile, solid-state read-write memory (NVRAM) and interface electronics.

13. The programmable annunciator control system of claim 7, wherein said nonvolatile storage subsystem further comprises an external storage device.

14. The programmable annunciator control system of claim 7, wherein said communications subsystem further comprises a bidirectional communications port and interface electronics.

15. The programmable annunciator control system of claim 15, wherein said communications subsystem further comprises an RS-485 bidirectional differential serial peripheral communications port and interface electronics.

16. The programmable annunciator control system of claim 15, wherein said communications subsystem further comprises an RS-232 bidirectional single-ended serial peripheral communications port and interface electronics.

17. The programmable annunciator control system of claim 1, wherein said set of annunciators further comprises at least one annunciator that senses, interprets, executes, and replies to commands from said command routine.

18. The programmable annunciator control system of claim 1, wherein said set of annunciators further comprises at least one annunciator that senses, interprets, executes, and replies to those commands from said command routine that are addressed uniquely to said annunciator.

19. The programmable annunciator control system of claim 1, wherein said set of annunciators further comprises at least one annunciator that senses, interprets, executes, and replies to those commands from said command routine that are addressed to a group including said annunciator as designated by zone.

20. The programmable annunciator control system of claim 1, wherein said set of annunciators further comprises at least one annunciator that senses, interprets, executes, and replies to those commands from said command

routine that are addressed to all annunciators as designated by an all-call addressing indicator.

21. The programmable annunciator control system of claim 1, wherein a polling routine interrogates and acquires status reports from said annunciators.

22. An annunciator control system, comprising:

a set of stored-sequence executable instructions implementing functions of the annunciator control system;

an annunciator control unit capable of executing said stored-sequence executable instruction set; and

a computer-readable clock to furnish timekeeping information to said annunciator control unit.

23. A programmable annunciator control system, comprising:

means for processing electronic signals;

means for annunciating messages in response to signals from said processing means;

means for communicating between said processing means and at least one said annunciating means;

means for assigning each of said annunciating means to at least one zone in accordance with user-defined criteria;

means for measuring clock time in a form readable by said processing means;

means for scheduling command events affecting at least one of said annunciating means; and

means for activating command events affecting at least one of said annunciating means.

24. The programmable annunciator control system of claim 23, further comprising means for sending audio signals to at least one of said annunciating means.

25. The programmable annunciator control system of claim 23, further comprising means for interrogating at least one of said annunciating means by a self-timed interrogation routine initiated at a predetermined time.

26. The programmable annunciator control system of claim 23, further comprising means for recording and evaluating the status of a plurality of said annunciating means.

27. The programmable annunciator control system of claim 23, further comprising means for visually representing information related to at least one of the identity, functional properties, and condition of at least one of said annunciating means.

28. The programmable annunciator control system of claim 23, further comprising means for recovering system configuration information from automated records of the status of at least one annunciator maintained in nonvolatile storage media.

29. The programmable annunciator control system of claim 23, further comprising means for correcting a system time setting after a system operation interruption and restoral, where the source of time data used for said means for correcting is a broadcast time service.

30. The programmable annunciator control system of claim 23, further comprising means for recovering system configuration information from automated records of the status of at least one annunciating means maintained in nonvolatile storage media.

31. A process for announcing, comprising the steps of:

communicating between an annunciator control unit and at least one annunciator;

assigning at least one annunciator to at least one zone in accordance with user-defined criteria;

measuring clock time in a form readable by a local annunciator control unit;

scheduling command events affecting at least one annunciator; and

activating command events affecting at least one annunciator.